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There appears to be no sexual dimorphism within *C. novaehollandiae*. However, males of *C. p. robusta*, except in first year birds, have a small spot of white feathers at the upper hind rim of the eye. This white spot is clearly visible in all plumage types.

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# DECLINING RATES OF CAPTURE OF BIRDS IN MIST-NETS

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## **INTRODUCTION**

It is a common experience of mist-netters that the numbers of birds caught often decrease after mist nets have been operated for several days in the same place. Karr (1981) noted that capture rates became low after the third day of operation when permanent residents learned to avoid the nets; a finding supported by other mistnetters (e.g. Willson and Moriarty 1976). As part of a teaching exercise, the decline in mist-net captures of birds in the understorey of wet sclerophyll forest in south-western Australia was investigated.

## METHODS

Mist nets were placed in a continuous line along a straight, overgrown track through essentially homogeneous vegetation in the Big Brook State Forest near Pemberton, South-western Australia. The main trees were karri Eucalyptus diversicolor with a few marri E. callophylla and an understorey dominated by Bossiaea laidlawiana, Trymalium spathulatum and Casuarina decussata. Nets were used in sets of ten adjacent 12 m long nets and operated from dawn to dusk on consecutive days. They were erected rapidly and quietly, with minimal disturbance, just prior to the day on which they were first operated. The work was carried out in the non-breeding season, in May, and the weather was very similar throughout the week of the study with no rain or strong wind.

Initially, two sets of 10 nets were erected in a line prior to day 1 of operation. After 3 days an additional set of 10 nets was added to the line. After 4 days the first set of 10 nets was removed from the start of the line, added to the other end and operated for the remaining 3 days. The second of the original sets of nets was operated in the same place for the whole week.

## **RESULTS AND DISCUSSION**

In all cases, a set of nets caught most birds on its first day of operation and catches declined thereafter (Table 1), although the totals of birds caught and the rates of decline varied between sets. The six species common in the karri forest understorey (Wooller and Milewski 1981) comprised most of the catch and were in similar proportions in all sets of nets.

## TABLE I

The numbers of birds caught in established and newly erected mist-nets in the karri forest understorey in southwestern Australia in May.

Day	Nets			
	1-10	11-20	21-30	31-40
1	25	15		
2	9	10		
3	4	12		
4	3	6	34	
5		8	14	25
6		1	10	19
7		2	2	2

The retrap rates of banded birds 25-30%) in this habitat over short periods (Calver and Wooller 1981, Wooller and Milewski 1981) suggests that many of the most common species are relatively sedentary. It seems probable that the disturbance, albeit slight, caused by operating nets and/or learning of the positions of nets by these resident birds accounts for the decline in captures. In other situations, for instance when relatively mobile honeyeaters are moving through heathlands (Wooller 1981), numbers caught in mist-nets do not decline in the manner demonstrated in the forest understorey.

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